Remarks

This Amendment is in response to the Office Action dated **June 1, 2004.** New claim 59, supported at least by Fig. 2, has been added. No new matter has been added.

35 USC 102

1.

Claims 50, 53-54, 57 are rejected under 35 USC 102(e) as being anticipated by Pinchasik et al. (US 5449373).

Claim 50 has been amended to recite that the first path is the shortest path along the first undulating band-like element which connects adjacent first connecting elements, and the second path is the shortest path along the second undulating band-like element which connects adjacent first connecting elements. Adjacent first interconnecting elements and the first and second paths which connect them define a cell. This combination of features is not taught or suggested by Pinchasik. The shortest pathways along elements 102 which extend between adjacent connectors are of the same length.

Withdrawal of the rejection as to claims 50 and 53 dependent therefrom is requested.

Claim 54 has been amended to recite that the first path is the shortest path along the first undulating band-like element between adjacent first interconnecting elements and the second path is the shortest path along the second undulating band-like element between adjacent second interconnecting elements. Also, each of the cells between the first and third undulating band-like elements is bounded by two interconnecting elements, a portion of the second undulating band and a portion of either the first or the third undulating band-like element. This combination of features is not taught or suggested in Pinchasik. The shortest pathways along elements 102 which extend between adjacent connectors are of the same length. Also, the Pinchasik paths do not span a plurality of peaks and troughs.

Withdrawal of the rejection as to claims 54 and 57 dependent therefrom is requested.

2.

Claims 46-48 and 58 are rejected under 35 USC 102(e) as being anticipated by Mathis et al. (US 6129755). Without conceding that the applied reference is prior art, Applicant notes the following:

Claim 46 includes the recitation that the first ends of the first interconnecting elements extend from every third peak of the proximal undulating band-like element and the second ends of the second interconnecting elements extend from every third trough of the distal undulating band-like element.

This feature is not present in the stent of Figs. 3 and 4 of Mathis. The connectors of Figs. 3 and 4 of Mathis extend from every second peak and trough. For at least this reason claim 46 and claims 47-48 and 58 dependent therefrom are patentable over Mathis.

Claim 47 further requires that the plurality of undulating band-like elements further comprises a second distal undulating band-like element having alternating peaks and troughs, the second distal undulating band-like element distal to the distal undulating band-like element. The plurality of interconnecting elements include third interconnecting elements extending between peaks on the distal undulating band-like element and troughs on the second distal undulating band-like element. Each second interconnecting element is separated from the third interconnecting element nearest to it by a single peak and a single trough of the distal undulating band-like element.

This feature is also not shown in Figs. 3 and 4 of Mathis. In Figs. 3 and 4 of Mathis, the separation is a single trough and not "a single peak and a single trough". At least for this additional reason, claim 47 and claim 48 dependent therefrom are further patentable over Mathis.

35 USC 103

Claims 39-41; 43-45, 52 and 56 are rejected under 35 USC 103(a) as being unpatentable over Mathis et al. (US 6129755) in view of Roubin et al. (US 6106548). Without conceding that the applied references are prior art, Applicant notes the following:

As to claims 39-41 and 42-44, the Office Action acknowledges that Mathis does not disclose a stent where the number of peaks of the first undulating band like element separating circumferential adjacent first interconnecting elements is less than the number of peaks of the second undulating band like element separating circumferential adjacent second

interconnecting elements. The Office Action states that in light of Roubin, it would have been obvious to omit one or more first connecting elements between band-like elements of the Mathis stent.

It would not be obvious to omit connecting elements from the Mathis stent. Claim 1 of Mathis recites that "any openings in said tubular member are substantially small, whereby any adjacent embolic material in a vessel is substantially trapped between said stent and a vessel." This concept is mirrored in the specification. One of ordinary skill in the art would not be motivated to remove connectors from the Mathis stent and thereby increase the size of the openings. In fact, this would defeat the purpose of the Mathis stent. If a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. See MPEP 2143.01 citing *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)

At least for this reason, there is no motivation to make the proposed combination and claims 39-41 and 42-44 are patentable over the proposed combination.

Even if, for the sake of argument only, it were obvious to make the proposed combination, the proposed combination would still not have all of the elements of claim 39. Specifically, the claim requires

1) that the number of peaks of the first undulating band-like element separating circumferentially adjacent first interconnecting elements is less than the number of peaks of the second undulating band-like element separating circumferentially adjacent second interconnecting elements;

2) that the number of peaks on the first undulating band-like element exceeds the number of first interconnecting elements, and that the number of peaks on the second undulating band-like element exceeds the number of second interconnecting elements, and

3) that interconnecting elements which are circumferentially adjacent one another are separated by a plurality of turns along each of the undulating band-like elements which they connect.

This combination of features would not be met by the proposed combination. Specifically, the stent of Fig. 9 does not meet the limitations. To the extent first, second and third undulating band-like elements are identified, even if the number of peaks on the first

undulating band-like element exceeds the number of first interconnecting elements, the number of peaks on the second undulating band-like element does not exceed the number of second interconnecting elements, contrary to the recitation of the claim. The specification does not provide a teaching that the pattern of omitted connectors should be such as to meet all of limitations 1-3 identified above.

At least for this additional reason, claim 39 is patentable over the proposed combination.

Independent claim 40 includes the limitation that each second interconnecting element is separated from the third interconnecting element nearest to it by a single peak of the third undulating band-like element and a single trough of the third undulating band-like element. This feature is not disclosed or suggested in either of the references individually or when taken together. At least for this additional reason, claim 40 is patentable over the proposed combination.

Claims 43-45, dependent from claim 40 are patentable over the proposed combination at least for the reason discussed above with respect to claim 40.

Further as to claim 45, there is no motivation from Roubin to combine the omission of connectors and the inclusion of different amplitude bands in the Mathis stent. The omission of connectors and the use of different amplitude bands are described as different ways of varying the flexibility of the Roubin stent. Roubin does not suggest combining these features in his stent, let alone in other stents.

As to claim 52 which depends from claim 50, as discussed above with respect to claim 39, there is no motivation to omit a connector from Mathis so that there would be fewer connectors than peaks on an undulating band. Even if, for the sake of argument only, there were motivation to omit connectors from the Mathis stent, there is no teaching or suggestion to both omit a connector from Mathis and to provide Mathis with different amplitude bands. These are taught in Rubin as being alternate ways of achieving flexibility in a stent. Roubin neither teaches combining these two techniques in his stent let alone in the stents of others. At least for these reasons, claim 52 is patentable over the proposed combination.

Claim 56 depends from claim 54 and requires both bands of different amplitudes and paths of different lengths which span a plurality of peaks and troughs. First, there is no

motivation to omits connectors from Mathis which would be necessary for the paths to span a plurality peaks and troughs. As discussed above with respect to claim 39, removing structure from the Mathis stent would result in larger gaps, contrary to the purpose of the Mathis patent. Also, as discussed above, there is no motivation to both remove connectors from Mathis and to introduce bands of different amplitude.

At least for this reason, claim 56 is patentable over the proposed combination of references.

Allowable Subject Matter

Claim 49 has been found to contain allowable subject matter. In light of the above discussion concerning base claim 46, claim 49 is believed to be in condition for allowance. Notification to that effect is requested.

Conclusion

At least for the above reasons, Applicant requests that the rejections be withdrawn and that the application be passed to issuance.

Respectfully submitted,

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